PEDIATRICS

UNDER THE CHARGE OF

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The Significance of Doehle's Inclusion Bodies in the Diagnosis of Scarlet Fever.—R. ISENSHMID and W. SCHEMENSKY (*Münch. Med. Wchnschr.*, 1914, lxi, 1997), in reviewing the work done by various investigators on the inclusion bodies of Doehle, states that in general most authors incline to impart more or less of a diagnostic value to these bodies. Only a very few regard them as the specific cause of scarlet fever. While found within the polynuclear leukocytes in the early days of practically every case of scarlet fever, yet authorities are unanimous in stating that they also occur in other diseases, namely the infectious type. In the authors' investigation two stains were used, the carbol methyl-green of Pappenheim, and the borax methylene-blue of Mason. Eighty cases of typical scarlet fever were investigated, the inclusion bodies being found in every one. While the bodies occur in many different forms, the authors found the long, triangular form with the long tail-like end to be more characteristic of scarlet fever than the other forms. So also are the bodies arranged like diplococci. The authors admit that these bodies are of diagnostic importance when they are not to be found in the blood but that during the early hours or days of the illness Doehle's bodies are often missing. The characteristic bodies were found in four out of five cases of croupous pneumonia. In diphtheria diagnosis Doehle's bodies are of value only when absent, showing that scarlet fever is not developing, or when found in great numbers when the case is more probably scarlet fever than diphtheric. The bodies were not found in cases of rötlen, measles, and pertussis. The absence of Doehle's bodies in a febrile attack, rules out fresh scarlet fever. The presence of Doehle's bodies excludes rötlen and makes measles an unlikely possibility.

Remarks on Methods of Diphtheria Prophylaxis.—KARL KASSOWITZ (*Münch. med. Wchnschr.*, 1914, lxi, 1935) gives his conclusions as to diphtheria prophylaxis based on methods used used by him in an epidemic of this disease in a settlement kindergarden. The principle of his method consists of a combined bacteriologic and serologic testing of each individual associated in the institution with subsequent effective isolation and serum prophylaxis. The method of some boards of health in school epidemics, of suspending classes for two weeks and a general disinfection, while apparently rigorous is ineffective in many instances because unknown or undiscovered carriers can become the foci of a fresh infection even after two weeks. The elimination of the diphtheria carrier is the first principle of an effective diphtheria prophylaxis. The indication for serum prophylaxis should be based only on the proof of diphtheria bacilli on the mucous membranes of the suspected individual. The substitution of optional serum prophylaxis for general bacteriological investigation of possibly infected cases is no protection against the development of further infections. By means of Schick's intracutaneous diphtheria reaction the field for prophylactic immunization can be still further narrowed. In the epidemic reported by Kassowitz, a bacteriological examination was made by cultures of all exposed children. This was repeated within one week. All suspicious cases, bacteriologically, were isolated. The school was closed, but only until a thorough disinfection was accomplished. These three procedures stopped the epidemic. The bacilli-carriers were given Schick's intracutaneous toxin injection and only those showing a positive reaction were given antitoxic serum. The cases were kept under constant observation with repeated bacteriologic and serologic control. The school was opened after its disinfection and no further cases developed although all but two of the eight proven carriers had returned to school after they had been proven negative by treatment. The original case, causing the epidemic had been returned to school one month after developing the disease and within ten days following his return five new cases appeared. He was included among the subsequent list of carriers.

Salvarsan in Scarlet Fever.—F. GLASER (*Deutsch. med. Wchnschr.* 1914, xl, 1760) reports the results of salvarsan used in the treatment of 42 cases of scarlet fever. The use of salvarsan is justified in this disease by three factors: The positive Wassermann reaction occurring at the height of the disease in many cases, the beneficient effects of the drug on severe necrotic inflammations of the throat, and lastly the therapeutic effect of salvarsan on a large number of protozoal diseases, such as malaria, frambesia, etc., to which class scarlet fever may possibly belong. Lenzmann and Klemperer have claimed excellent results from this treatment and note reduction in temperature from 1° to 2° C. with marked general improvement and local improvement of the throat and lymphatics. Torey warns against large doses which cause diarrhea, collapse, and nephritis, but admits the temperature is reduced and that general improvement is marked by this treatment. Jochmann, in 117 cases, claims the same good results, especially the necrotic sore throat, but claims the subsequent complications of the disease are not prevented by the salvarsan. Chill, vomiting, and diarrhea are mentioned by all these observers as occurring in over half of the cases. The methods used were intravenous and subcutaneous as in Glaser's 42 cases. In the latter 0.1 gram salvarsan was used for every 10kg. of body weight. Three septic cases practically moribund, were not affected by the salvarsan. Out of 15 cases with doubtful prognosis two died. In half these cases the effect on the temperature was marked, and the membrane in the throat was influenced favorably. The good effect on the ulcerative processes was unmistakable but chills, vomiting, and diarrhea were frequent and tended to lower the patient's strength. Complications, such as otitis media, glandular enlargement, and nephritis were not warded off in this group, by the treatment. In the last group of 24 cases, with an absolutely good prognosis, the injection of salvarsan caused a critical fall of temperature in over half of the cases. The chill, vomiting, and diarrhea accompanying many of the injections passed off in a few hours. The treatment apparently had no effect on